

ABSTRACT

Cable modem termination systems (CMTS) having directional couplers in the primary signal path facilitate redundancy without the need for active components, e.g., switches or amplifiers, in the primary signal path. The use of directional couplers in the primary signal path allows a backup CMTS transceiver to provide redundancy to multiple primary CMTS transceivers through the use of switching outside of the primary signal path. Additional directional couplers in the backup signal path may be used to allow testing and maintenance of the backup CMTS transceiver without disturbing the primary signal path.